

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**401 M Street, S.W.**  
**WASHINGTON, D.C. 20460**

**Paperwork Reduction Act Notice:** The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

**DATA MATRIX**

Date: May 29, 2019			EPA Reg. No./File Symbol: 48222-XX	Page 1 of 9	
Applicant's/Registrant's Name & Address Agro-K Corporation c/o Spring Trading Company, 203 Dogwood Trail, Magnolia, TX 77354			Product Name: SYSTEM-CAL BLUE		
Ingredient(s) Calcium Salts of Phosphorous Acid					
Guideline Reference Number	Guideline Study Name	MRID	Submitter	Status	Note
Product Identity and Composition					
880.1100	Product Identity and Composition	50822401	Agro-K Corporation	OWN	
880.1200	Description of starting materials, production & formulation process	50822401	Agro-K Corporation	OWN	
880.1400	Discussion of Formation of Impurities	50822401	Agro-K Corporation	OWN	
Analysis and Certified Limits					
830.1700	Preliminary Analysis	50822417	Agro-K Corporation	OWN	
830.1750	Certified Limits	50822417	Agro-K Corporation	OWN	
830.1800	Enforcement analytical method	50822408	Agro-K Corporation	OWN	
Physical and Chemical Characteristics					
830.6302	Color	50822402	Agro-K Corporation	OWN	
830.6303	Physical State	50822402	Agro-K Corporation	OWN	
830.6304	Odor	50822402	Agro-K Corporation	OWN	
830.6313	Stability to normal and elevated temperatures, metals and metal	50822402	Agro-K Corporation	OWN	
830.6315	Flammability	50822402	Agro-K Corporation	OWN	
830.6317	Storage Stability	50822402	Agro-K Corporation	OWN	
830.6319	Miscibility	50822402	Agro-K Corporation	OWN	
830.6320	Corrosion Characteristics	50822402	Agro-K Corporation	OWN	
830.7000	pH	50822402	Agro-K Corporation	OWN	
830.7050	UV/Visible light absorption	50822402	Agro-K Corporation	OWN	
830.7100	Viscosity	50822402	Agro-K Corporation	OWN	
Signature <i>Aaron V. Hutchison</i>			Name and Title Aaron V. Hutchison, Consultant		Date May 29, 2019

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Applicant's/Registrant's Name & Address Agro-K Corporation c/o Spring Trading Company, 203 Dogwood Trail, Magnolia, TX 77354			Product Name: SYSTEM-CAL BLUE - Technical		
Ingredient(s) Calcium Salts of Phosphorous Acid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.7200	Melting Point/Melting Range	50822402	Agro-K Corporation	OWN	
830.7220	Boiling Point/Boiling Range	50822402	Agro-K Corporation	OWN	
830.7300	Density/relative density/bulk density	50822402	Agro-K Corporation	OWN	
830.7520	Particle Size, fiber length, and diameter distribution	50822402	Agro-K Corporation	OWN	
830.7550; 830.7560; 830.7570	Partition coefficient (n-Octanol/Water)	50822402	Agro-K Corporation	OWN	
830.7840	Water Solubility	50822402	Agro-K Corporation	OWN	
830.7950	Vapor Pressure	50822402	Agro-K Corporation	OWN	
Supporting Information					
860.1100	Chemical identity				1
860.1200	Directions for use				1
Nature of the Residue					
860.1300	Nature of the residue in plants				1
860.1300	Nature of the residue in livestock				2
860.1340	Residue analytical method				1
860.1360	Multiresidue method				1
Magnitude of the Residue					
860.1400	Potable water				3
860.1400	Fish				3
860.1400	Irrigated crops				3
860.1460	Food handling				3
Signature <i>Aaron V. Hutchison</i>			Name and Title Aaron V. Hutchison, Consultant		Date May 29, 2019

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Applicant's/Registrant's Name & Address Agro-K Corporation c/o Spring Trading Company, 203 Dogwood Trail, Magnolia, TX 77354			Product Name: SYSSTEM-CAL BLUE Generic Data Requirements		
Ingredient(s) Calcium Salts of Phosphorous Acid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
860.1480	Meat/milk/poultry/eggs				3
860.1500	Crop field trials				3
860.1520	Processed food/feed				3
860.1540	Anticipated residues				3
860.1550	Proposed tolerances				3
860.1560	Reasonable grounds in support of the petition				3
860.1650	Submittal of analytical reference standards				3
Tier I (Human Health Assessment)					
Acute Testing					
870.1100	Acute oral toxicity - rat	50822410 44873501	Agro-K Corporation JH Biotech	OWN OLD	
870.1200	Acute dermal toxicity	50822410 44873502	Agro-K Corporation JH Biotech	OWN OLD	
870.1300	Acute inhalation toxicity - rat	50822410 44873505	Agro-K Corporation JH Biotech	OWN OLD	
870.2400	Primary eye irritation - rabbit	50822410 44873504	Agro-K Corporation JH Biotech	OWN OLD	
870.2500	Primary dermal irritation	50822410 44873503	Agro-K Corporation JH Biotech	OWN OLD	
870.2600	Dermal sensitization	50822410	Agro-K Corporation	OWN	
Signature <i>Aaron V. Hutchison</i>			Name and Title Aaron V. Hutchison, Consultant		Date May 29, 2019

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Applicant's/Registrant's Name & Address Agro-K Corporation c/o Spring Trading Company, 203 Dogwood Trail, Magnolia, TX 77354			Product Name: SYSTEM-CAL BLUE		
Ingredient(s) Calcium Salts of Phosphorous Acid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
		44873506	JH Biotech	OLD	
none	Hypersensitivity incidents				
Subchronic Testing					
870.3100	90-day oral (one species)	50822414	Agro-K Corporation	OWN	
870.3250	90-day dermal - rat	50822414	Agro-K Corporation	OWN	
870.3465	90-day inhalation - rat	50822414	Agro-K Corporation	OWN	
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Ingredient(s) Calcium Salts of Phosphorous Acid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
Developmental Toxicity					
870.3700	Prenatal developmental - rat preferably	50822411	Agro-K Corporation	OWN	
Mutagenicity Testing					
870.5100	Bacterial reverse mutation test	50822413	Agro-K Corporation	OWN	
870.5300 870.5375 870.5395	In vitro mammalian cell assay Mammalian Erythrocyte Micronucleus Test	50822413	Agro-K Corporation	OWN	
Tier II (Human Health Assessment)					
Mutagenicity Testing (In vivo cytogenetics)					
870.5385 870.5895	In vivo Mammalian Cytogenetics				3
Developmental Toxicity					
870.3700	Prenatal developmental				3
Special Tests					
880.3550	Immunotoxicity				3
Applicator/User Exposure					
875.1100	Dermal outdoor exposure				3
875.1200	Dermal indoor exposure				3
875.1300	Inhalation outdoor exposure				3
875.1400	Inhalation indoor exposure				3
875.1500	Biological monitoring				3
Signature <i>Aaron V. Hutchison</i>			Name and Title Aaron V. Hutchison, Consultant		Date May 29, 2019

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Ingredient(s) Calcium Salts of Phosphorous Acid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
Tier III (Human Health Assessment)					
Chronic Testing/Special Testing					
880.3800	Immune response				3
870.3800	Reproduction and fertility effects				3
870.4100	Chronic oral - rodent and nonrodent				3
870.4200	Carcinogenicity - two species - rat and mouse preferred				3
870.5380	Mammalian spermatogonial chromosome aberration test				3
Special Testing					
870.7200	Companion animal safety				6
Tier I ( Nontarget Organisms and Environmental Fate Data)					
Avian Testing					
850.2100	Avian acute oral toxicity	50822412	Agro-K Corporation	OWN	
850.2200	Avian dietary toxicity	50822412	Agro-K Corporation	OWN	
Aquatic Organism Testing					
850.1075	Fish acute toxicity, freshwater	50822412	Agro-K Corporation	OWN	
850.1010	Aquatic invertebrate acute toxicity, freshwater	50822412	Agro-K Corporation	OWN	
Nontarget Plant Testing					
850.4100	Terrestrial Plant Toxicity, Seedling emergence	50822412	Agro-K Corporation	OWN	
850.4150	Terrestrial Plant Toxicity, Vegetative vigor	50822412	Agro-K Corporation	OWN	
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Ingredient(s) Calcium Salts of Phosphorous Acid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
Insect Testing					
880.4350	Nontarget Insect Testing	50822412	Agro-K Corporation	OWN	
Tier II ( Nontarget Organisms and Environmental Fate Data)					
Environmental Fate Testing					
163-1 (835.1230)	Sediment and soil adsorption/desorption for parent and <del>degradates</del>				7
163-1 (835.1240)	Soil column leaching				7
163-2 (835.1410)	Laboratory volatilization from soil				7
161-1 (835.2120)	Hydrolysis				7
161-1 (835.4100)	Aerobic soil metabolism				7
161-2 (835.2240)	Photodegradation in water				7
161-3 (835.2410)	Photodegradation on soil				7
162-2 (835.4200)	Anaerobic soil metabolism				7
162-4 (835.4300)	Aerobic aquatic metabolism				7
162-3 (835.4400)	Anaerobic aquatic metabolism				7
880.4425	Dispenser - water leaching				7
Nontarget Plant					
850.4225	Seedling emergence				7
850.4250	Vegetative vigor				7
Tier III ( Nontarget Organisms and Environmental Fate Data)					
Aquatic Fauna Chronic, Life Cycle, and Field Studies					
Signature <i>Aaron V. Hutchison</i>			Name and Title Aaron V. Hutchison, Consultant		Date May 29, 2019

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Ingredient(s) Calcium Salts of Phosphorous Acid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
850.1300 850.1400 850.1500	Freshwater fish/invertebrate testing				7
850.1025 850.1035 850.1045 850.1055 850.1350 850.1400 850.1500	Marine/Estuarine fish/invertebrate animal testing				7
850.1950	Aquatic field fish/invertebrate testing				7
Terrestrial Wildlife					
850.2300	Avian Reproduction				7
850.2400	Wild mammal acute toxicity				7
850.2500	Terrestrial field testing				7
Beneficial Insects					
850.3040	Field testing for Pollinators				7
Nontarget Plants					
Signature <i>Aaron V. Hutchison</i>			Name and Title Aaron V. Hutchison, Consultant		Date May 29, 2019

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Ingredient(s) Calcium Salts of Phosphorous Acid						
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
850.4225 850.4250 850.4300 850.4450	Nontarget plant				7	
Signature <i>Aaron V. Hutchison</i>			Name and Title Aaron V. Hutchison, Consultant		Date May 29, 2019	

## DATA MATRIX FOOTNOTES

1. Product has exemption from the requirement of a tolerance (40 CFR 180.1210) when used as a fungicide/SAR inducer in or on all food commodities.
2. Product not to be used on livestock.
3. Tier II or Tier III testing not required for this chemical.
4. Not Required – Only required to support uses involving purposeful application to the human skin or which would result in comparable prolonged human exposure to the product.
5. Not Required – Not likely to cause significant levels of repeated inhalation exposure to the pesticide as a gas, vapor, or aerosol.
6. Not Required – Not likely to result in exposure to domestic animals through direct application or consumption of treated feed.
7. Environmental fate studies are not required for biochemical pesticides unless adverse effects on nontarget species are observed as a result of acute testing (Tier I) for ecological effects. No adverse effects are suggested by the data.

OWN: I am the Original Data Submitter for this study.

EXC: I have obtained written permission of the Original Data Submitter to cite this exclusive-use study in support of this application.

PER: I have obtained the permission of the Original Data Submitter to use this study in support of this application.

OLD: The study was submitted more than 15 years ago and all periods of compensation have expired.

PL: The study is in the public literature.

PAY: I have notified in writing the Original Data Submitter or, if the cite-all method is used, all companies listed in the most current Data Submitters List for this ingredient, and have offered (a) to pay compensation in accordance with FIFRA sections 3(c)(1)(F) and/or 3(c)(2)(B), and (b) to commence negotiations to determine the amount and terms of compensation, if any, to be paid for the use of the study(ies).

GAP: This Guideline data requirement is a data gap as defined in 40 CFR sections 152.83(a) and 152.96.

FOR: I am taking the formulator's exemption for this ingredient only. Other columns of this line should be marked "NA". However, if this product is to be registered/reregistered for additional uses for which the purchased EPA registered ingredient is not supported, additional data must be submitted or cited here to support those uses.

Note: If additional explanation is needed, enter a footnote number in this column and attach the corresponding explanation.